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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,267	09/16/2003	Natalie Timms	50325-0783	3417

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EXAMINER

GEE, JASON KAI YIN

ART UNIT	PAPER NUMBER
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2134

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/664,267	Applicant(s) TIMMS, NATALIE	
	Examiner Jason K. Gee	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



KAMBIZ ZAND
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>05/07/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is response to communication: filed on 09/16/2003.
2. Claims 1-46 are currently pending in this application. Claims 1, 11, 14-27, and 37 are independent claims.
3. The IDS received 05/07/2004 has been accepted.

Claim Objections

4. Claims 33-36 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. As per claims 33-36, the applicants recite claims that are verbatim to claims 7-10. These claims do not further limit the invention.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 1-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 1-46, the independent claims recite applying the service to the encrypted packet if it is determined that the identifier is present. It is not recited however the situation in which it is determined that the identifier is not present. It is unclear what would occur in this situation. If nothing is performed, the claim would only constitute the limitations of examining the packet and determining whether an identifier is present. In this scenario, the acts of determining and examining do not result in a tangible result, rendering a 101 rejection as well. Therefore, the recited claim 1 is unclear and indefinite. Also, it is well known in the art to examine a packet and determine whether an identifier is present.

As per claims 2, 7, 8, 9, 10, 15, 20, 21, 22, 23, 28, 33, 34, 35, 38, 43, 44, 45, and 46, claims 2, 28, and 38 recite encrypting the packet. However, the packet recited in the previous independent claim recites that the packet is already encrypted. It is unclear whether this packet is encrypted again after it is already encrypted. For purposes of examination, it is interpreted that an initial packet is encrypted, and this packet is the packet that is examined.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3, 5, 7, 11, 14-16, 18, 20, 24, 27-29, 31, 33, 34, 37-39, 41, and 43 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Buer et al. US Patent Application Publication 2004/0005061 (hereinafter '061).

As per claim 1, '061 teaches a method for applying a service to an encrypted packet comprising: examining an encrypted packet (paragraph 76); determining whether an identifier associated with the service is present in the encrypted packet (paragraph 76); if it is determined that the identifier is present in the encrypted packet, applying the service to the encrypted packet (paragraphs 76 and 77).

As per claim 2, as best understood by the Examiner, '061 teaches encrypting the packet, wherein said step of encryption includes establishing said identifier in the packet (paragraphs 73-75)

As per claim 3, '061 recites wherein said identifier is based on at least an Internet Key Exchange (IKE) ID stored in the packet (paragraph 43; paragraph 72; wherein IKE is an Ipsec standard protocol).

As per claim 5, '061 teaches wherein the identifier is based on at least an entry in a security association database (paragraph 76).

As per claim 7, as best understood by the Examiner, '061 teaches wherein the identifier is established in a profile of the packet (paragraph 75 recites "the peer assembles the data in a packet, including the identifier").

As per claim 11, '061 teaches a method for applying a service to a packet comprising: encrypting the packet to create an encrypted packet (paragraphs 73-75); examining an identifier in the encrypted packet (paragraph 76), wherein the identifier is based on an IKE ID of the encrypted packet (paragraph 43, 72, wherein IKE is an Ipsec standard protocol); determining whether the identifier in the encrypted packet is associated with a service to be applied to the encrypted packet (paragraph 76); and if it is determined that the identifier is associated with a service to be applied to the encrypted packet, applying the service to the encrypted packet (paragraphs 76 and 77).

Claims 14, 15, 16, 18, 20, and 24 are rejected using the same basis of arguments used to reject claims 1, 2, 3, 5, 7, and 11, respectively. '061 teaches a processor to perform such functions, and it is inherent that a computer processing system would include a computer readable medium with instructions to perform the steps taught.

Independent claim 27 is rejected using the same basis of arguments used to reject claim 1, wherein an apparatus and the means to perform the methods are taught throughout '061.

Claim 28 is rejected using the same basis of arguments used to reject claim 2.

Claim 29 is rejected using the same basis of arguments used to reject claim 3.

Claim 31 is rejected using the same basis of arguments used to reject claim 5.

Claim 33 is rejected using the same basis of arguments used to reject claim 7.

Claim 34 is rejected using the same basis of arguments used to reject claim 8.

Independent claim 37 is rejected using the same basis of arguments used to reject claims 1 and 14 above. Memory, processors, and instructions stored to perform such steps are inherent to the teachings taught in '061, and may be found, for example, in paragraphs 32-35, 39, 47, etc.

Claim 38 is rejected using the same basis of arguments used to reject claims 2 and 14 above.

Claim 39 is rejected using the same basis of arguments used to reject claims 3 and 15 above.

Claim 41 is rejected using the same basis of arguments used to reject claim 5 above.

Claim 43 is rejected using the same basis of arguments used to reject claim 7 above.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 4, 8, 17, 21, 30, 40, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over '061 as applied above, and in view of Piper's "The Internet IP Security Domain of Interpretation for ISAKMP" (November, 1998, hereinafter Piper).

As per claim 4, '061 does not explicitly teach wherein the IKE ID comprises one or more of ID_IPV4_ADDR, ID_FQDN, ID_USER_FQDN, ID_IPV4_ADDR_SUBNET, ID_IPV6_ADDR, ID_IPV6_ADDR_SUBNET, ID_IPV4_ADDR_RANGE, ID_IPV6_ADDR_RANGE, id_DER_ASNI_DN, ID_DER_ASNI_GN, and ID_KEY_ID. However, these identifiers are well known in the IKE protocol, as shown in pages 19 and 20 of Piper.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to include the specific identifiers taught in claim 4. One of ordinary skill in the art would have been motivated to perform such an addition as the identifiers that are taught are standard identifiers in the IPSEC protocol, in which IKE is an IPSEC standard protocol. This is shown in page 17 of Piper, where it indicates in 4.6.1.1 the identifiers in IPSEC.

As per claim 8, Piper discusses the use of ISAKMP throughout the reference, such as in pages 1 and 2.

Claims 17 and 21 are rejected using the same basis of arguments used to reject claims 4 and 8, respectively. '061 teaches a processor to perform such functions, and it is inherent that a computer processing system would include a computer readable medium with instructions to perform the steps taught.

Claim 30 is rejected using the same basis of arguments used to reject claim 4.

Claim 40 is rejected using the same basis of arguments used to reject claims 4 and 17 above.

Claim 44 is rejected using the same basis of arguments used to reject claim 8 above.

11. Claims 6, 19, 32, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over '061 as applied above, and in view of Roge US Patent No. 6,721,202 (hereinafter '202).

As per claim 6, '061 does not explicitly teach wherein identifiers map to quality of service groups. However, this is taught in '202 in col. 4 line 55 to col. 5 line 19 (wherein a packet is processed regarding information such as identifiers relating to quality of service).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to include processing identifiers regarding quality of service. One of ordinary skill in the art would have been motivated to perform such an addition as quality of service provides different priority to different users or data flows, or guarantees a certain level of performance to a data flow. By processing quality of service information, the invention would be able to guarantee the performance of service at a certain level.

Claims 19 is rejected using the same basis of arguments used to reject claim 6. '061 teaches a processor to perform such functions, and it is inherent that a computer processing system would include a computer readable medium with instructions to perform the steps taught.

Claim 32 is rejected using the same basis of arguments used to reject claim 6.

Claim 42 is rejected using the same basis of arguments used to reject claim 6 above.

12. Claims 9, 10, 12, 22, 23, 25, 35, 36, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over '061 as applied above, and in view of Valenci et al. US Patent Application Publication 2003/0005279 (hereinafter '279).

As per claim 9, '061 does not explicitly teach pre-classification of the packet prior to the step of encryption. It does teach, however, associations of identifiers and session keys before encryption, as taught in paragraphs 73 and 74. The pre-classification of the packet itself is taught in '279 in paragraphs 34 and 37.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to include the teachings of '279 with '061. Preclassifying a packet is important because it allows a data packet to be processed correctly. This is taught in paragraph 34: "Packet classification feature 351 enables intermediate driver agent 300 to match a data packet with its corresponding crypto information from a table of crypto information so that the data packet can be processed correctly.)

As per claim 10, '279 teaches wherein services are applied based on both identifiers and pre-classification (paragraph 27, 34, 35).

Claim 12 is rejected using the same basis of arguments used to reject claims 9 and 10 above. Pre-classifying packets based on contents of the packet is taught in paragraphs 34 and 37.

Claims 22, 23, and 25 are rejected using the same basis of arguments used to reject claims 9, 10, and 12, respectively. '061 teaches a processor to perform such functions, and it is inherent that a computer processing system would include a computer readable medium with instructions to perform the steps taught.

Claim 35 is rejected using the same basis of arguments used to reject claim 9.

Claim 36 is rejected using the same basis of arguments used to reject claim 10.

Claim 45 is rejected using the same basis of arguments used to reject claim 9.

Claim 46 is rejected using the same basis of arguments used to reject claim 10.

13. Claims 13 and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over '061 as applied above, and in view of Ylonen et al. US Patent Application Publication 2002/0062344 (hereinafter '344).

As per claim 13, '061 does not explicitly teach copying at least one bit into a header to identify a characteristic of the packet. However, this is taught in '344 in paragraph 11. Applying a service based on the identifier is taught in '061 in paragraphs 73-75, and applying the service based on the header value and the identifier is taught in paragraph 11 of '344.

At the time of the invention, it would have been obvious to combine the teachings of '344 with '061. Header information including at least one bit to identify a characteristic of a packet is well known in the art, as described in '344. As is taught in '344 in paragraph 11, this is well known using the Ipsec protocol, and it would be

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obvious to combine the features taught in paragraph 11 with the invention of '061, as '061 teaches the utilization of the Ipsec protocol.

Claims 26 is rejected using the same basis of arguments used to reject claim 13. '061 teaches a processor to perform such functions, and it is inherent that a computer processing system would include a computer readable medium with instructions to perform the steps taught.

Conclusion


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason K. Gee whose telephone number is (571) 272-6431. The examiner can normally be reached on M-F, 7:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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